

Rail-guided transport systemClaims:

1. Rail-guided transport system for persons and material in underground mining and tunnel construction, consisting of a railway network and transport vehicles guided in this railway network,
characterized in that
the transport vehicle, in each instance, is equipped with sensors (1-6) for detecting optical, acoustical, temperature, and acceleration data both at its front end, in the direction of travel, and at its opposite end, which sensors are connected with a control computer disposed in the transport vehicle, whereby the sensors interact with active and passive signal transmitters in the railway network.
2. Rail-guided transport system according to claim 1,
characterized in that
the control computer is part of a telematics system that monitors and controls the transport system.
3. Rail-guided transport system according to claim 2,
characterized in that

the control computer is connected with the telematics system by way of wireless LAN technology, whereby the railway network is divided up into several Hot Spot regions.

4. Rail-guided transport system according to claim 2, characterized in that
a Leaky Feeder antenna line is provided for data transmission over the entire travel path.
5. Rail-guided transport system according to one of claims 1 to 4, characterized in that
the transport vehicle is equipped with optical and acoustical signal transmitters.
6. Rail-guided transport system according to one of claims 1 to 5, characterized in that
the transport vehicle is a single-track suspended railway.
7. Rail-guided transport system according to one of claims 1 to 5, characterized in that
the transport vehicle is a ground railway.

8. Rail-guided transport system according to one of claims 1 to 7,
characterized in that
ultrasound sensors, laser scanners, infrared sensors, acceleration sensors, imaging sensors, and microphones are used as sensors.
9. Rail-guided transport system according to one of claims 1 to 8,
characterized in that
end station and stop station signal transmitters that can be freely positioned can be installed in the railway network.
10. Rail-guided transport system according to one of claims 1 to 9,
characterized in that
the vehicle is equipped with at least one on-board camera, which can be remote-controlled by the telematics central station.